

ABSTRACT OF THE DISCLOSURE

A light-emitting diode includes a cup component, a plurality of electrical conducting traces formed on a surface of the cup component using an MID means, a light-emitting diode chip mounted on the cup component and

5 electrically connected to at least a first and second electrical conducting trace of the plurality of electrical conducting traces, and a first connection part connected to at least the first and second electrical conducting traces for providing electrical connections to external circuitry. The light emitting diode may also include a protective element that electrically protects the light-emitting

10 diode chip, and the connection part may include first and second leads connected electrically to the first and second electrical conducting traces, respectively. The cup component, light emitting diode chip, protective element, leads and other components may be assembled together and molded and sealed with resin.